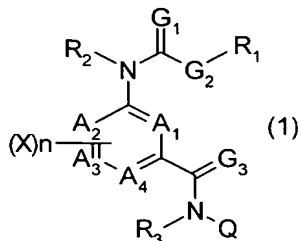


CLAIMS

1. A compound represented by formula (1):



wherein A₁, A₂, A₃, and A₄ independently represent a carbon atom, a
 5 nitrogen atom, or an oxidized nitrogen atom; R₁ represents a C1-C6
 alkyl group which may be substituted, a phenyl group which may be
 substituted, a naphthyl group which may be substituted, or a
 heterocyclic group which may be substituted; R₂ and R₃
 independently represent a hydrogen atom, a C1-C4 alkyl group which
 10 may be substituted, or a C1-C4 alkylcarbonyl group which may be
 substituted; G₁, G₂, and G₃ independently represent an oxygen atom
 or a sulfur atom; Xs may be the same or different and each
 represent a hydrogen atom, a halogen atom, a C1-C4 alkyl group
 which may be substituted, or an amino group which may be
 15 substituted; n represents an integer of 0 to 4; Q represents a
 phenyl group which may be substituted, a naphthyl group which may
 be substituted, a tetrahydronaphthyl group which may be
 substituted, or a heterocyclic group which may be substituted.

20 2. The compound according to claim 1, wherein in formula (1),
 A₁, A₂, A₃, and A₄ independently represent a carbon atom, a
 nitrogen atom, or an oxidized nitrogen atom; R₁ represents:
 a C1-C6 alkyl group,
 a C1-C6 haloalkyl group,

- a C2-C6 alkenyl group,
- a C2-C6 haloalkenyl group,
- a C2-C6 alkynyl group,
- a C2-C6 haloalkynyl group,
- 5 a C3-C8 cycloalkyl group,
- a C3-C8 halocycloalkyl group,
- a phenyl group,
- a substituted phenyl group having one or more substituents which may be the same or different and which are selected from a halogen
- 10 atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group,
- 15 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group,
- a naphthyl group,
- 20 a substituted naphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group,
- 25 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl

group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group,

a heterocyclic group (which represents a pyridyl group, a

5 pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole

10 group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group),

a substituted heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a

15 tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group) having one or more substituents which may

20 be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6

25 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a

C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxycarbonyl group,

-E₁-Z₁-R₄

(wherein E₁ represents a C1-C4 alkylene group, a C2-C4 alkenylene

5 group, a C3-C4 alkynylene group, a C1-C4 haloalkylene group, a C2-

C4 haloalkenylene group, or a C3-C4 haloalkynylene group; R₄

represents a hydrogen atom, a C1-C6 alkyl group, a C2-C6 alkenyl

group, a C2-C6 alkynyl group, a C1-C6 haloalkyl group, a C2-C6

haloalkenyl group, a C2-C6 haloalkynyl group,

10 a C3-C8 cycloalkyl group,

a C3-C8 halocycloalkyl group,

a phenyl group,

a substituted phenyl group having one or more substituents which

may be the same or different and which are selected from a halogen

15 atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8

cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy

group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6

haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6

haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6

20 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl

group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a

C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and

a C1-C4 alkoxycarbonyl group,

a naphthyl group,

25 a substituted naphthyl group having one or more substituents which

may be the same or different and which are selected from a halogen

atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8

cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group,

a heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group), or

a substituted heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group) having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy

group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group); and Z_1 represents -O-, -S-, -SO-, -SO₂-, -C(=O)-, -C(=O)O-, -OC(=O)-, -N(R₅)-, -C(=O)N(R₅)-, or -N(R₅)C(=O)- (R₅ represents a hydrogen atom, a C1-C4 alkyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, or a C1-C4 alkoxy carbonyl group)), or

-E₂-R₆

(wherein E₂ represents a C1-C4 alkylene group, a C2-C4 alkenylene group, a C3-C4 alkynylene group, a C1-C4 haloalkylene group, a C2-C4 haloalkenylene group, or a C3-C4 haloalkynylene group, and R₆ represents a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a cyano group, a nitro group, a hydroxyl group, a phenyl group, a substituted phenyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a C1-C6

haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxycarbonyl group,

5 a naphthyl group,

a substituted naphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8

cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6

haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxycarbonyl group,

a heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a

20 tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group), or

25 a substituted heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a

tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group) having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxycarbonyl group);

R_2 and R_3 independently represent a hydrogen atom, a C1-C4 alkyl group, a C1-C4 alkylcarbonyl group, or a C1-C4 haloalkylcarbonyl group; G_1 , G_2 , and G_3 independently represent an oxygen atom or a sulfur atom; X_s may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C1-C4 alkoxy group, a C1-C4 haloalkoxy group, a C1-C4 alkylthio group, a C1-C4 haloalkylthio group, a C1-C4 alkylsulfinyl group, a C1-C4 haloalkylsulfinyl group, a C1-C4 alkylsulfonyl group, a C1-C4 haloalkylsulfonyl group, a cyano group, a nitro group, an amino group, or an amino group which may be substituted by a C1-C4 alkyl group;

n represents an integer of 0 to 4; and

Q represents a phenyl group,
 a substituted phenyl group having one or more substituents which
 may be the same or different and which are selected from a halogen
 atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8
 5 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy
 group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may
 be substituted by at least one hydroxyl group, a C1-C6 alkylthio
 group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a
 C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-
 10 C6 haloalkylsulfonyl group, a C1-C6 haloalkylsulfonyloxy group, a
 C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a
 cyano group, a nitro group, a hydroxyl group, a
 pentafluorosulfanyl group, a phenyl group, a substituted phenyl
 group (which may have the same or different substituents selected
 15 from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group,
 a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6
 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a
 C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6
 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6
 20 haloalkylsulfonyl group, a C1-C6 haloalkylsulfonyloxy, a cyano
 group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl
 group), a thienyl group, and a substituted thienyl group (which
 may have the same or different substituents selected from a
 halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-
 25 C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy
 group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6
 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6

haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a C1-C6 haloalkylsulfonyloxy group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group),

5 a naphthyl group,

a substituted naphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy

10 group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a

15 hydroxyl group, and a pentafluorosulfanyl group,

a heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a thienyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl

20 group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group),

a substituted heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a thienyl group, an oxazolyl group, an isoxazolyl

25 group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group)

having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group,

10 a tetrahydronaphthyl group, or

a substituted tetrahydronaphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, and a

20 pentafluorosulfanyl group (excluding case (1) in which Q represents a 3,4-dichlorophenyl group when R1 represents a methyl group, case (2) in which Q represents an unsubstituted phenyl group when R1 represents an ethyl group, and case (3) in which Q represents an unsubstituted pyridyl group when R1 represents an

25 unsubstituted phenyl group.)

3. The compound according to claim 2, wherein in formula (1),

G₁ and G₃ each represent an oxygen atom, and Q represents a phenyl group,

a substituted phenyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a C1-C6 haloalkylsulfonyloxy group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group, a naphthyl group,

a substituted naphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group, a heterocyclic group (which represents a pyridyl group or a pyrazolyl group),

a substituted heterocyclic group (which represents a pyridyl group or a pyrazolyl group) having one or more substituents which may be

the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group, a tetrahydronaphthyl group, or

10 a substituted tetrahydronaphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group.

20

4. The compound according to claim 3, wherein in formula (1), Xs may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C4 alkyl group, or a trifluoromethyl group, and n is an integer of 0 to 4.

25

5. The compound according to claim 4, wherein in formula (1), R₁ represents:

a C1-C6 alkyl group,
 a C1-C6 haloalkyl group,
 a C2-C6 alkenyl group,
 a C2-C6 haloalkenyl group,
 5 a C2-C6 alkynyl group,
 a C2-C6 haloalkynyl group,
 a C3-C8 cycloalkyl group,
 a C3-C8 halocycloalkyl group,
 -E₁-Z₁-R₄

10 (wherein E₁ represents a C1-C4 alkylene group, a C2-C4 alkenylene group, a C3-C4 alkynylene group, a C1-C4 haloalkylene group, a C2-C4 haloalkenylene group, or a C3-C4 haloalkynylene group, R₄ represents a hydrogen atom, a C1-C6 alkyl group, a C2-C6 alkenyl group, a C2-C6 alkynyl group, a C1-C6 haloalkyl group, a C2-C6
 15 haloalkenyl group, a C2-C6 haloalkynyl group, and Z₁ represents -O-, -S-, -SO-, or -SO₂-), or
 -E₂-R₆

(wherein E₂ represents a C1-C4 alkylene group, a C2-C4 alkenylene group, a C3-C4 alkynylene group, a C1-C4 haloalkylene group, a C2-
 20 C4 haloalkenylene group, or a C3-C4 haloalkynylene group, and R₆ represents a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group,
 a cyano group,
 a nitro group,
 a hydroxyl group,
 25 a phenyl group,
 a substituted phenyl group having one or more substituents which may be the same or different and which are selected from a halogen

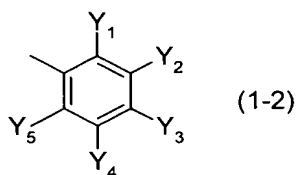
- atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, a C1-C4 alkoxy carbonyl group, and a pentafluorosulfanyl group, a pyridyl group,
- 10 a substituted pyridyl group having one or more substituents selected from a halogen atom, a C1-C6 haloalkyl group, and a C1-C6 haloalkoxy group, a thienyl group, or a tetrahydrofuryl group).
- 15 6. The compound according to claim 5, wherein in formula (1), A₁, A₂, A₃, and A₄ are all carbon atoms, or one any of A₁, A₂, A₃, and A₄ is a nitrogen atom or an oxidized nitrogen atom, and G₂ is an oxygen atom.
- 20 7. The compound according to claim 6, wherein in formula (1), Q represents a phenyl group, a substituted phenyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may
- 25 be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a

C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a pentafluorosulfanyl group, a cyano group, and a nitro group;

a pyridyl group, or

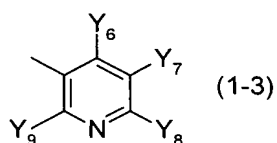
- 5 a substituted pyridyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio
 10 group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a pentafluorosulfanyl group, a cyano group, and a nitro group.

- 15 8. The compound according to claim 7, wherein in formula (1), Q is a substituent represented by formula (1-2) or (1-3):



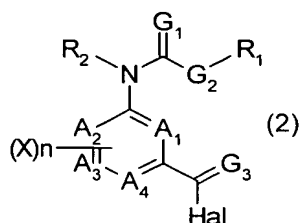
- (wherein Y₁, Y₂, Y₄, and Y₅ may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C6 alkyl group, a
 20 C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a pentafluorosulfanyl group, a cyano group, or a nitro group, and Y₃
 25 represents a C1-C6 haloalkyl group, a C1-C6 haloalkoxy group, a

C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 haloalkylthio group, a C1-C6 haloalkylsulfinyl group, a C1-C6 haloalkylsulfonyl group, or a pentafluorosulfanyl group, but only one of Y_1 and Y_5 represents a hydrogen atom)



(wherein Y_6 , Y_7 , and Y_9 may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a pentafluorosulfanyl group, a cyano group, or a nitro group, and Y_8 represents a C1-C6 haloalkyl group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 haloalkylthio group, a C1-C6 haloalkylsulfinyl group, a C1-C6 haloalkylsulfonyl group, or a pentafluorosulfanyl group, but only one of Y_6 and Y_9 represents a hydrogen atom).

9. A compound represented by formula (2):



wherein A_1 , A_2 , A_3 , and A_4 independently represent a carbon atom, a nitrogen atom, or an oxidized nitrogen atom, and R_1 represents the following:

- 5 a C1-C6 alkyl group,
- a C1-C6 haloalkyl group,
- a C2-C6 alkenyl group,
- a C2-C6 haloalkenyl group,
- a C2-C6 alkynyl group,
- 10 a C2-C6 haloalkynyl group,
- a C3-C8 cycloalkyl group,
- a C3-C8 halocycloalkyl group,
- a phenyl group,
- a substituted phenyl group having one or more substituents which
- 15 may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6
- 20 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group,
- 25 a naphthyl group,
- a substituted naphthyl group having one or more substituents which may be the same or different and which are selected from a halogen

atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxycarbonyl group,

5 a heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group),

10 a substituted heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group) having one or more substituents which may

25 be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8

cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group), or

-E₁-Z₁-R₄

- 10 (wherein E₁ represents a C1-C4 alkylene group, a C2-C4 alkenylene group, a C3-C4 alkynylene group, a C1-C4 haloalkylene group, a C2-C4 haloalkenylene group, or a C3-C4 haloalkynylene group; R₄ represents a hydrogen atom, a C1-C6 alkyl group, a C2-C6 alkenyl group, a C2-C6 alkynyl group, a C1-C6 haloalkyl group, a C2-C6 haloalkenyl group, a C2-C6 haloalkynyl group,
- 15 a C3-C8 cycloalkyl group,
a C3-C8 halocycloalkyl group,
a phenyl group,
a substituted phenyl group having one or more substituents which
- 20 may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a
- 25

C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and
 a C1-C4 alkoxycarbonyl group,
 a naphthyl group,
 a substituted naphthyl group having one or more substituents which
 5 may be the same or different and which are selected from a halogen
 atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8
 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy
 group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6
 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6
 10 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6
 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl
 group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a
 C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and
 a C1-C4 alkoxycarbonyl group,
 15 a heterocyclic group (which represents a pyridyl group, a
 pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a
 furyl group, a tetrahydrofuryl group, a thienyl group, a
 tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl
 group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl
 20 group, an isothiazolyl group, a thiadiazolyl group, a pyrrole
 group, an imidazolyl group, a triazolyl group, a pyrazolyl group,
 or a tetrazolyl group),
 a substituted heterocyclic group (which represents a pyridyl group,
 a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group,
 25 a furyl group, a tetrahydrofuryl group, a thienyl group, a
 tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl
 group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl

group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group) having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group), and

Z_1 represents -O-, -S-, -SO-, -SO₂-, -C(=O)-, -C(=O)O-, -OC(=O)-, -N(R₅)-, -C(=O)N(R₅)-, or -N(R₅)C(=O)- (R₅ represents a hydrogen atom, a C1-C4 alkyl group, a C1-C4 alkylcarbonyl group, or a C1-C4 alkoxy carbonyl group)), or

-E₂-R₆

(wherein E₂ represents a C1-C4 alkylene group, a C2-C4 alkenylene group, a C3-C4 alkynylene group, a C1-C4 haloalkylene group, a C2-C4 haloalkenylene group, or a C3-C4 haloalkynylene group, and R₆ represents a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a cyano group, a nitro group, a hydroxyl group, a phenyl group, a substituted phenyl group having one or more substituents which

may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and

10 a C1-C4 alkoxy carbonyl group, a naphthyl group, a substituted naphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8

15 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl

20 group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group, a heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a

25 furyl group, a tetrahydrofuryl group, a thienyl group, a tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl

group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group), or

a substituted heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a tetrahydrofuryl group, a thienyl group, a tetrahydrothienyl group, a tetrahydropyranyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group) having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, a pentafluorosulfanyl group, a C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a C1-C4 alkylcarbonyloxy group, and a C1-C4 alkoxy carbonyl group);

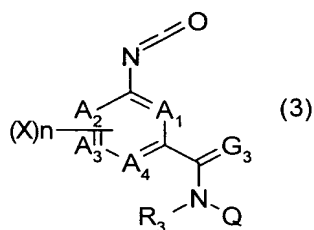
R₂ represents a hydrogen atom, a C1-C4 alkyl group, a C1-C4 alkylcarbonyl group, or a C1-C4 haloalkylcarbonyl group;

G₁, G₂, and G₃ independently represents an oxygen atom or a sulfur atom;

Xs may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a

C1-C4 alkoxy group, a C1-C4 haloalkoxy group, a C1-C4 alkylthio group, a C1-C4 haloalkylthio group, a C1-C4 alkylsulfinyl group, a C1-C4 haloalkylsulfinyl group, a C1-C4 alkylsulfonyl group, a C1-C4 haloalkylsulfonyl group, a cyano group, a nitro group, or an amino group which may be substituted by a C1-C4 alkyl group;
 5 n represents an integer of 0 to 4; and
 Hal represents a halogen atom (excluding a case in which R1 is an unsubstituted benzyl group when X is a hydrogen atom.)

10 10. A compound represented by formula (3):



wherein A₁, A₂, A₃, and A₄ independently represent a carbon atom, a nitrogen atom, or an oxidized nitrogen atom; R₃ represents a hydrogen atom, a C1-C4 alkyl group, a C1-C4 alkylcarbonyl group, or a C1-C4 haloalkylcarbonyl group;
 15 or a C1-C4 haloalkylcarbonyl group; G₃ represents an oxygen atom or a sulfur atom; Xs may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C1-C4 alkoxy group, a C1-C4 haloalkoxy group, a C1-C4 alkylthio group, a C1-C4 haloalkylthio group, a C1-C4 alkylsulfinyl group, a C1-C4 haloalkylsulfinyl group, a C1-C4 alkylsulfonyl group, a C1-C4 haloalkylsulfonyl group, a cyano group, a nitro group, or an amino group which may be substituted
 20 by a C1-C4 alkyl group;
 n represents an integer of 0 to 4; and

Q represents a phenyl group,
 a substituted phenyl group having one or more substituents which
 may be the same or different and which are selected from a halogen
 atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8
 5 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy
 group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may
 be substituted by at least one hydroxyl group, a C1-C6 alkylthio
 group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a
 C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-
 10 C6 haloalkylsulfonyl group, a C1-C6 haloalkylsulfonyloxy group, a
 C1-C4 alkylcarbonyl group, a C1-C4 haloalkylcarbonyl group, a
 cyano group, a nitro group, a hydroxyl group, a
 pentafluorosulfanyl group, a phenyl group, a substituted phenyl
 group (which may have the same or different substituents selected
 15 from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group,
 a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6
 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a
 C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6
 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6
 20 haloalkylsulfonyl group, a C1-C6 haloalkylsulfonyloxy group, a
 cyano group, a nitro group, a hydroxyl group, and a
 pentafluorosulfanyl group), a thienyl group, a substituted thienyl
 group (which may have the same or different substituents selected
 from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group,
 25 a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6
 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a
 C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6

haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a C1-C6 haloalkylsulfonyloxy group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group),

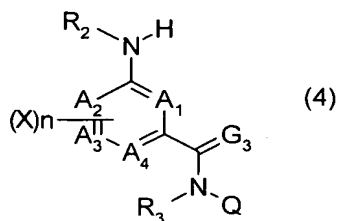
5 a naphthyl group,

a substituted naphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C3-C8 cycloalkyl group, a C3-C8 halocycloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group,

15 a heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a thienyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, a pyrrole group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group),
 20 a substituted heterocyclic group (which represents a pyridyl group, a pyridine-N-oxide group, a pyrimidinyl group, a pyridazyl group, a furyl group, a thienyl group, an oxazolyl group, an isoxazolyl group, an oxadiazolyl group, a thiazolyl group, an isothiazolyl group, a thiadiazolyl group, an imidazolyl group, a triazolyl group, a pyrazolyl group, or a tetrazolyl group) having one or

- more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group,
- 10 a tetrahydronaphthyl group, or
- a substituted tetrahydronaphthyl group having one or more substituents which may be the same or different and which are selected from a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a cyano group, a nitro group, a hydroxyl group, and a pentafluorosulfanyl group.
- 20

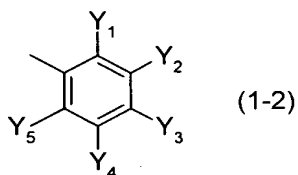
11. A compound represented by formula (4):



wherein A₁, A₂, A₃, and A₄ independently represent a carbon atom, a

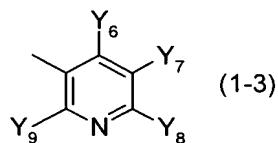
nitrogen atom, or an oxidized nitrogen atom; R_2 and R_3 independently represent a hydrogen atom, a C1-C4 alkyl group, a C1-C4 alkylcarbonyl group, or a C1-C4 haloalkylcarbonyl group; G_3 represents an oxygen atom or a sulfur atom; X_s may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C4 alkyl group, a C1-C4 haloalkyl group, a C1-C4 alkoxy group, a C1-C4 haloalkoxy group, a C1-C4 alkylthio group, a C1-C4 haloalkylthio group, a C1-C4 alkylsulfinyl group, a C1-C4 haloalkylsulfinyl group, a C1-C4 alkylsulfonyl group, a C1-C4 haloalkylsulfonyl group, a cyano group, a nitro group, or an amino group which may be substituted by a C1-C4 alkyl group; n represents an integer of 0 to 4; and

Q is a substituent represented by formula (1-2) or (1-3):



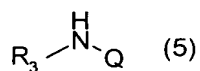
(wherein Y_1 , Y_2 , Y_4 , and Y_5 may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a pentafluorosulfanyl group, a cyano group, or a nitro group, and Y_3 represents a C1-C6 haloalkyl group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 haloalkylthio group, a C1-C6 haloalkylsulfinyl group, a C1-C6 haloalkylsulfonyl group, or a

pentafluorosulfanyl group, but only one of Y_1 and Y_5 represents a hydrogen atom);



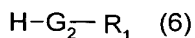
(wherein Y_6 , Y_7 , and Y_9 may be the same or different and each
 5 represent a hydrogen atom, a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a
 10 pentafluorosulfanyl group, a cyano group, or a nitro group, and Y_8 represents a C1-C6 haloalkyl group, a C1-C6 haloalkoxy group, a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, a C1-C6 haloalkylthio group, a C1-C6 haloalkylsulfinyl group, a C1-C6 haloalkylsulfonyl group, or a
 15 pentafluorosulfanyl group, but only one of Y_6 and Y_9 represents a hydrogen atom).

12. A method for producing the compound according to claim 1, the method comprising reacting the compound represented by formula
 20 (2) according to claim 9 with a compound represented by formula (5):



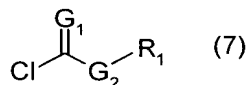
wherein R_3 and Q each represent the same as in claim 1.

13. A method for producing the compound according to claim 1, the method comprising reacting the compound represented by formula (3) according to claim 10 with a compound represented by formula (6):



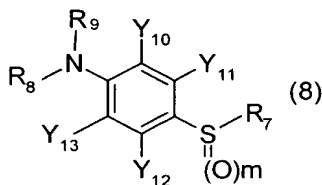
wherein R_1 and G_2 each represent the same as in claim 1.

14. A method for producing the compound according to claim 1, the method comprising reacting the compound represented by formula (4) according to claim 11 with a compound represented by formula (7):



wherein R_1 , G_1 , and G_2 each represent the same as in claim 1.

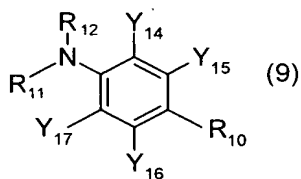
15. An aniline derivative represented by formula (8):



wherein R_7 represents a C1-C6 haloalkyl group, Y_{10} , Y_{11} , Y_{12} , and Y_{13} may be the same or different and each represent a hydrogen atom, a halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a pentafluorosulfanyl group, a cyano

group, or a nitro group, and R_8 and R_9 independently represent a hydrogen atom, a C1-C4 alkyl group, a m-nitrobenzoyl group, or a substituted m-nitrobenzoyl group, and m represents 0, 1, or 2.

- 5 16. An aniline derivative represented by formula (9):



wherein R_{10} represents a C1-C6 haloalkyl group which may be substituted by at least one hydroxyl group, Y_{14} , Y_{15} , Y_{16} , and Y_{17} may be the same or different and each represent a hydrogen atom, a
 10 halogen atom, a C1-C6 alkyl group, a C1-C6 haloalkyl group, a C1-C6 alkoxy group, a C1-C6 haloalkoxy group, a C1-C6 alkylthio group, a C1-C6 haloalkylthio group, a C1-C6 alkylsulfinyl group, a C1-C6 haloalkylsulfinyl group, a C1-C6 alkylsulfonyl group, a C1-C6 haloalkylsulfonyl group, a pentafluorosulfanyl group, a cyano
 15 group, or a nitro group, and R_{11} and R_{12} independently represent a hydrogen atom, a C1-C4 alkyl group, a m-nitrobenzoyl group, or a substituted m-nitrobenzoyl group.

17. An insecticide comprising the compound according to any one
 20 of claims 1 to 8 as an active ingredient.

18. An agricultural/horticultural insecticide comprising the compound according to any one of claims 1 to 8 as an active ingredient.

19. A method for using a chemical comprising treating a useful crop or soil with an effective amount of the compound according to any one of claims 1 to 8, for protecting the useful crop from harmful organisms.

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20. A method for preventing pests comprising using the compound according to any one of claims 1 to 8 and at least one fungicide and/or insecticide in combination.

10 21. The method for preventing pests according to claim 20, wherein the fungicide and/or insecticide is selected from azole fungicides such as triadimefon, hexaconazole, propiconazole, ipconazole, prochloraz, and triflumizole; pyrimidine fungicides such as pyrifenox and fenarimol; anilinopyrimidine fungicides such as mepanipyrim and cyprodinil; acylalanine fungicides such as
15 metalaxyl, oxadixyl, and benalaxyl; benzimidazole fungicides such as thiophanate-methyl and benomyl; dithiocarbamate fungicides such as mancozeb, propineb, zineb, and metiram; organochlorine fungicides such as tetrachloroisophthalonitrile; carboxamide
20 fungicides such as carpropamid and ethaboxam; morpholine fungicides such as dimethomorph; strobilurin fungicides such as azoxystrobin, kresoxim-methyl, metominostrobin, orysastrobin, fluoxastrobin, trifloxystrobin, dimoxystrobin, pyraclostrobin, and picoxystrobin; dicarboxyimide fungicides such as iprodione and
25 procymidone; soil-applied fungicides such as flusulfamide, dazomet, methyl isothiocyanate, and chloropicrin; copper fungicides such as basic copper chloride, basic copper sulfate, copper nonylphenol

sulfonate, oxine-copper, and DBEDC; inorganic fungicides such as sulfur and zinc sulfate; organophosphate fungicides such as edifenphos, tolclofos-methyl, and fosetyl-aluminum; melanin biosynthesis inhibitors such as phthalide, tricyclazole, pyroquilon, and diclocymet; antibiotics such as kasugamycin, validamycin, and polyoxins; fungicidal natural products such as repe seed oil; and other fungicides such as benthiavalicarb-isopropyl, iprovalicarb, cyflufenamid, fenhexamid, quinoxifen, spiroxamine, diflumetorim, metrafenone, picobenzamid, proquinazid, silthiofam, oxypoconazole, famoxadone, cyazofamid, fenamidone, furametpyr, zoxamide, boscalid, tiadinil, simeconazole, chlorothalonil, cymoxanil, captan, dithianon, fluazinam, folpet, dichlofluanid, (RS)-N-[2-(1,3-dimethylbutyl)thiophen-3-yl]-1-methyl-3-trifluoromethyl-1*H*-pyrazole-4-carboxamide (penthiopyrad; ISO proposed), oxycarboxin, mepronil, flutolanil, triforine, oxolinic acid, probenazole, acibenzolar-*S*-methyl, isoprothiolane, ferimzone, diclomezine, pencycuron, fluoroimide, chinomethionate, iminoctadine-triacetate, and iminoctadine-albesilate; synthetic pyrethroid insecticides such as allethrin, tetramethrin, resmethrin, phenothrin, furamethrin, permethrin, cypermethrin, deltamethrin, cyhalothrin, cyfluthrin, fenpropathrin, tralomethrin, cycloprothrin, flucythrinate, fluvalinate, acrinathrin, tefluthrin, bifenthrin, empenethrin, beta-cyfluthrin, zeta-cypermethrin, and fenvalerate, and various isomers thereof and pyrethrum extracts; organophosphate insecticides such as DDVP, cyanophos, fenthion, fenitrothion, tetrachlorvinphos, dimethylvinphos, propaphos,

methylparathion, temephos, phoxim, acephate, isofenphos, salithion,
 DEP, EPN, ethion, mecarbam, pyridafenthion, diazinon, pirimiphos-
 methyl, etrimfos, isoxathion, quinalphos, chlorpyrifos-methyl,
 chlorpyrifos, phosalone, phosmet, methidathion, oxydeprofos,
 5 vamidothion, malathion, phenthoate, dimethoate, formothion,
 thiometon, ethylthiometon, phorate, terbufos, profenofos,
 prothiofos, sulprofos, pyraclofos, monocrotophos, naled,
 fosthiazate, and cadusafos; carbamate insecticides such as NAC,
 MTMC, MIPC, BPMC, XMC, PHC, MPMC, ethiofencarb, bendiocarb,
 10 pirimicarb, carbosulfan, benfuracarb, methomyl, oxamyl, and
 aldicarb; arylpropylether insecticides such as etofenprox and
 halfenprox; silylether insecticides such as silafluofen;
 insecticidal natural products such as nicotine-sulfate, polynactin
 complex, abamectin, milbemectin, and BT agents; insecticides such
 15 as, cartap, thiocyclam, bensultap, diflubenzuron, chlorfluazuron,
 teflubenzuron, triflumuron, flufenoxuron, flucycloxuron,
 hexaflumuron, fluazuron, imidacloprid, nitenpyram, acetamiprid,
 dinotefuran, pymetrozine, fipronil, buprofezin, fenoxycarb,
 pyriproxyfen, methoprene, hydroprene, kinoprene, diafenthion,
 20 triazamate, tebufenozide, and endosulfan; acaricides such as
 dicofol, chlorobenzilate, bromopropylate, tetradifon, CPCBS, BPPS,
 chinomethionate, amitraz, benzoximate, hexythiazox, fenbutatin
 oxide, cyhexatin, dienochlor, clofentezine, pyridaben,
 fenpyroximate, fenazaquin, and tebufenpyrad; novaluron;
 25 noviflumuron; emamectin benzoate; clothianidin; thiacloprid;
 thiamethoxam; flupyrzofos; acequinocyl; bifenazate;
 chromafenozide; etoxazole; fluacrypyrim; flufenzine; halofenozide;

indoxacarb; methoxyfenozide; spiroadiclofen; tolfenpyrad; gamma-cyhalothrin; ethiprole; amidothumet; bistrifluron; flonicamid; flubrocyclothrinate; flufenimer; pyridalyl; pyrimidifen; spinosad; and spiromesifen.